

## ABSTRACT

### Noncorrosive auxiliaries for soldering aluminium

The invention relates to noncorrosive auxiliaries for soldering aluminium and for upgrading aluminium alloys based on alkali metal fluoroaluminates, their preparation and their use.

According to the invention, the noncorrosive auxiliaries contain metallates.

To form the metallates, metal compounds of the elements of main groups 2 to 5 of the PTE or of the transition elements in the form of their salts or oxides are used as reactants. In particular, their halides, nitrates, carbonates, sulphates, phosphates, borates, hexafluorosilicates or oxides, for example, are used.

According to the invention, the metal compounds are introduced into the reaction mixture of hydrofluoric acid and/or hydrated alumina and/or alkali metal compound, with the point in time when the metal compound is added being able to be varied as a function of the desired degree of functionalization of the surface.